

Criminal Justice Information Services Division Information Technology

National Law Enforcement Public Contact Collection

Flat File Technical Specification

Version 2023.0 07/31/2023



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CHANGE DESCRIPTION FORM

Revision	Change Description	Created/Changed By	Date
2023.0	Initial Documentation Release	C. Swiger B. Ross	5/12/2023

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1 BACKGROUND

This National Law Enforcement Public Contact (LEPC) Data Collection Flat File Technical Specification has been developed by the Federal Bureau of Investigation (FBI) to offer insight into data collection development requirements and best practices.

In 2017, the FBI's CJIS Division Advisory Policy Board (APB) recommended the FBI's Uniform Crime Reporting (UCR) Program begin collecting and reporting the number of police contacts with the public in the following three categories on an annual basis:

- Citizens calls for service.
- Unit/officer-initiated contacts.
- Court/ bailiff activities.

The FBI's UCR Program will compile these data in the LEPC Data Collection to establish a standard national measure of the number of times law enforcement officers have contact with the public. The LEPC is an expansion of annual counts, which includes law enforcement employee counts.

The purpose of collecting this additional information is to provide context to other law enforcement data collections administered by the UCR Program, including the National Use-of-Force Data (UoF) Collection and the Law Enforcement Officers Killed and Assaulted (LEOKA) Data Collection. The use of categories commonly defined among these law enforcement data collections will also help ensure consistency of data submitted.

Law enforcement agencies can submit the number of contacts with the public using the data logged in their computer-aided dispatch system (also known as CAD), records management system, or other system (e.g., docket sheets, call logs, etc.) used to facilitate incident response and communication in the field. If such records are not available, agencies may submit an estimated number of contacts based on officers' workload (e.g., citation, street/foot patrol, traffic duty, public outreach, etc.) The use of both actual and, when necessary, estimated numbers will account for the variety of circumstances different agencies respond to and allow for better interpretation of these data.

Agencies can use one of the three methods to submit annual LEPC data:

- A Flat File Technical Specification for bulk submission.
- A web services option for bulk submission.
- The LEPC submission page of the Collection of Law Enforcement and Crime Tool, or COLECT, in the Law Enforcement Enterprise Portal, also known as LEEP.

Specifically, this technical specification will describe how to submit LEPC data to the FBI UCR Program using a Flat File format.

2 SERVICE MESSAGES

The Flat File Service Messages are submitted to the FBI using the JavaScript Object Notation (JSON) record format. A service message is composed of a message timestamp, action, and the LEPC record.

The LEPC record is used when an agency is reporting or updating law enforcement public contact information for a given year.

The Flat File Service Message requires an agency ORI Number, Action Type, and a Data Year. These data elements and values will be defined in the service message section for "Law Enforcement Public Contact Report."

The submission of a new LEPC Report or an update of a LEPC Report requires the citizen calls for service, officer-initiated contacts, and court activities information. See Section 3.2.2.

The LEPC Report requires the data elements for public contact details and shall be populated with the defined values for each data element.

Each participating law enforcement agency will be responsible for reporting information for its own officers connected to public contact that meet the criteria of the data collection.

2.1 JSON Data Elements

2.1.1 Law Enforcement Public Contact Report

An LEPC Report, at a minimum, provides the estimated numbers of citizens calls for service, officer-initiated contacts, and court activities. At most, the LEPC report will provide the actual counts for these previously named categories.

Public contact data for LEPC Reports with an "INSERT" action type will be added to the database only if the LEPC Report does not already exist. If the LEPC Report already exists in the database, the LEPC Report data will be updated with submitted data. The system uses three data elements within the submission for comparison against the database to determine if a record already exists. The data elements are agency ORI, action type, and data year. This action should be used to avoid resetting the status of a LEPC Report if it already exists and no changes are intended.

Incidents with a "DELETE" action type will be deleted from the system. The delete message requires the three data elements within the LEPC Report for comparison against the database to determine if a record already exists. The data elements are agency ORI, action type, and data year. If the record exists, it is functionally deleted from the system. This means that the LEPC Report data is marked as deleted but not actually removed from the database and an audit trail of changes is established.

2.2 Public Contact Segment

There are nine (9) data elements within this segment, which help to supply the actual or estimated counts for citizen calls for service, officer-initiated contacts, and court activities.

2.2.1 Flat File Service Message

Each LEPC Report will contain one (1) data segment (Public Contact). The segment type consists of a number of data elements. The segments are briefly described and summarized in sections 2.2.2.1.

The three service message data elements below are mandatory for all submissions.

- Data Element 1 Agency ORI
- Data Element 2 Action Type
- Data Element 3 Data Year
 - Data Element 4 Public Contact

Public Contact is the JSON object for an LEPC submission.

2.2.2 Flat File Layout

The layout of the Flat File is illustrated below.

2.2.2.1 Public Contact Segment

The Public Contact segment is the master segment and is used to provide the information to the LEPC collection.

The data elements used in the Public Contact segment are:

Data Element 5 – Citizen Calls for Service

Data Element 5A - Citizen Calls for Service Count

Data Element 5B - Citizen Calls for Service Value Type

Data Element 6 – Officer Initiated

Data Element 6A - Officer Initiated Count

Data Element 6B – Officer Initiated Value Type

Data Element 7 – Court Activities

Data Element 7A – Court Activities Count

Data Element 7B – Court Activities Value Type

3 DATA ELEMENT DEFINITIONS

The data elements and data values identified in this section represent those required for participating in the LEPC data collection. Contributors must use these data elements and data values to report.

Note: All data element names and values submitted in the JSON files are case-sensitive.

3.1 Data Elements

Contributors must use a series of established data elements, i.e., data fields, within the segment (Public Contact) of the LEPC Report to provide estimated or actual totals. Examples of these details include Data Element 5A (citizens_call_for_service_count) or Data Element 6B (officer_initiated_value_type).

For each data element, reporting agencies should choose the most appropriate data value(s), i.e., specific characteristics or types for the information being reported that have assigned codes. Although some data values require a specific format, most are codes from an approved list. Most of these data values are represented in tables with the code in the first column and a description of the data value in the second column. For example, for Data Element 3 (data_year), the specific format for the data value is YYYY.

3.2 Data Element Descriptions

The data elements identified in the subsequent sections are grouped by the type of data they represent, e.g., public contact data.

Each data element has a short description to indicate how and when to use the data element. This description also includes the format and ranges for the data element. Each data element also has the following information defined:

Occurrence: This identifies how many times the data element occurs in a segment or incident.

Mandatory: Some data elements are required in order to have a complete/valid data submission, i.e., they are *mandatory*. Others are *conditional* based on the data values submitted for other data elements. Data elements that are reported at the discretion of the agency submitting the incident are considered *optional*.

Example construction: This provides an example of the entry in the JSON file for this data element.

Edits: Identifies the edits/business rules that will be validated by the system.

Note that the position and order of data elements in a JSON record are not significant and are not a requirement, however agency ORI Number, Action Type, and Data Year should be the first elements of the service message. Data element names are identified by enclosing it within double quotes followed by a colon.

3.2.1 Flat File Service Message Data Elements

The Flat File Service Message has three data elements. Every message provided must have the values populated.

The Flat File Service Message is constructed with an opening squiggly bracket "{"and is closed with a closing squiggly bracket "}".

Example Construction: {}

3.2.1.1 Data Element 1: Agency ORI

Agency ORI is used to indicate the owning agency's Originating Agency Identifier. The value is an alphanumeric ORI of nine (9) characters in length.

Occurrence: Once Mandatory: Yes

Example Construction: "agencyORI": "WV3456700"

Edits:

• The value must be nine (9) characters in length.

• The ORI must be a valid UCR ORI.

• ORI must be associated with the submitter in the system.

3.2.1.2 Data Element 2: Action Type

Action Type is used to indicate the action to occur for the Service Message.

Occurrence: Once Mandatory: Yes

Example Construction: "actionType": "INSERT"

Data Values:

Value	Description
INSERT	Indicates a new report or an update to an existing report
DELETE	Indicates a report requires deletion

3.2.1.3 Data Element 3: Data Year

Data Year is used to indicate the year that the LEPC data represent for a specific ORI.

Occurrence: Once Mandatory: Yes

Example Construction: "dataYear": "2022"

- The value must be four (4) numbers in length.
- The data year must be a valid year.
- The data year must be 2022 or later.

3.2.2 Data Element 4 Public Contact Segment

The Public Contact segment of the Service Message has nine (9) data elements. The segment also contains the type of public contact along with its count. Contributors enter the following data elements as free text or from the list of values, which are specific to the Public Contact segment.

Occurrence: Once

Mandatory: Mandatory for Insert Action Type, Optional for Delete Action Type

Example Construction: "publicContact": { },

- The opened and closed squiggly bracket represents public contact for an agency and its data elements and data values. The Public Contact data elements and values are defined in the following text.
 - o Data Element 5 Citizen Calls for Service
 - o Data Element 5A Citizen Calls for Service Count
 - Data Element 5B Citizen Calls for Service Value Type

3.2.2.1 Data Element 5 Citizen Calls for Service

The citizenCallsForService data element is used to indicate the counts of calls of service for the owning agency's Originating Agency Identifier.

Occurrence: Once Mandatory: Yes

Example Construction: "citizenCallsForService ": {

Edits:

• The opened and closed squiggly bracket represents Citizen Calls for Service for an agency and its data elements and data values. The Citizen Calls for Service data elements and values are defined in the following text.

3.2.2.2 Data Element 5A Citizen Calls for Service Count

The Count data element is used to indicate the agency's case count for Citizen Calls for Service.

Occurrence: Once

Mandatory: Conditional. If ACTUAL or ESTIMATED are used in the valueType field, it is mandatory, otherwise it must not be included in the callsForService object.

Example Construction: "count": 22

- Can only contain numbers.
- Maximum length supported is eight (8) numeric positions.
- Cannot be zero (0). If count is zero (0), then please use the valueType of NOT AVAILABLE or NOT APPLICABLE.

3.2.2.3 Data Element 5B Citizen Calls for Service Value Type

The valueType data element is used to indicate the type of count provided.

Occurrence: Once Mandatory: Yes

Example Construction: "valueType": "ACTUAL"

Data Values:

Value	Description
ACTUAL	Indicates an actual count of values
ESTIMATED	Indicates an estimated count of values
NOT_APPICABLE	Indicates that the count is not applicable for ORI
NOT_AVAILABLE	Indicates that the count is not available for ORI

3.2.2.4 Data Element 6 Officer Initiated

The officerInitiated data element is used to indicate the counts for officer-initiated contacts of the owning agency's Originating Agency Identifier.

Occurrence: Once Mandatory: Yes

Example Construction: " officerInitiated ": {

Edits:

• The opened and closed squiggly bracket represents Officer-Initiated contacts for an agency and its data elements and data values. The Officer Initiated data elements and values are defined in the following text.

3.2.2.5 Data Element 6A Officer Initiated Count

The count data element is used to indicate the agency's case count for Officer Initiated contacts.

Occurrence: Once

Mandatory: Conditional. If ACTUAL or ESTIMATED are used in the valueType field, it is mandatory, otherwise it must not be included in the officerInitiated object.

Example Construction: "count": 22

- Can only contain numbers.
- Maximum length supported is eight (8) numeric positions.
- Cannot be zero (0). If count is zero (0), then please use the valueType of NOT_AVAILABLE or NOT_APPLICABLE.

3.2.2.6 Data Element 6B Officer Initiated Value Type

The valueType data element is used to indicate the type of count provided.

Occurrence: Once Mandatory: Yes

Example Construction: "valueType": "ACTUAL"

Data Values:

Value	Description
ACTUAL	Indicates an actual count of values
ESTIMATED	Indicates an estimated count of values
NOT_APPICABLE	Indicates that the count is not applicable for ORI
NOT_AVAILABLE	Indicates that the count is not available for ORI

3.2.2.7 Data Element 7 Court Activities

The courtActivities data element is used to indicate the counts for officer-initiated contacts of the owning agency's Originating Agency Identifier.

Occurrence: Once Mandatory: Yes

Example Construction: " courtActivities ": {

Edits:

• The opened and closed squiggly bracket represents Court Activities for an agency and its data elements and data values. The Court Activities data elements and values are defined in the following text.

3.2.2.8 Data Element 7A Court Activities Count

The count data element is used to indicate the agency's case count for Court Activities.

Occurrence: Once

Mandatory: Conditional. If ACTUAL or ESTIMATED are used in the valueType field, it is mandatory, otherwise it must not be included in the courtActivities object.

Example Construction: "count": 22

- Can only contain numbers.
- Maximum length supported is eight (8) numeric positions.
- Cannot be zero (0). If count is zero (0), then please use the valueType of NOT AVAILABLE or NOT APPLICABLE.

3.2.2.9 Data Element 7B Court Activities Value Type

The valueType data element is used to indicate the type of count provided.

Occurrence: Once Mandatory: Yes

Example Construction: "valueType": "ACTUAL"

Data Values:

Value	Description
ACTUAL	Indicates an actual count of values
ESTIMATED	Indicates an estimated count of values
NOT_APPICABLE	Indicates that the count is not applicable for ORI
NOT AVAILABLE	Indicates that the count is not available for ORI

APPENDIX A: SAMPLE FILES

This section provides examples of the LEPC Flat File Format for submission.

```
A. LEPC with ActionType of INSERT
{
      "agencyORI": "WV8675309",
"actionType": "INSERT",
       "dataYear": 2023,
       "publicContact": {
              "citizenCallsForService": {
                    "count": 22,
                    "valueType": "ACTUAL"
             "count": null,
                     "valueType": "NOT APPLICABLE"
             },
"courtActivities": {
    " ----+" · null,
                     "count": null,
                     "valueType": "NOT AVAILABLE"
              }
      }
}
   B. LEPC with ActionType of DELETE
{
       "agencyORI": "WV8675309",
       "actionType": "DELETE",
       "dataYear": 2023
}
   C. LEPC Flat File in JSON Format (Utilized to send multiple agencies information in a single
      JSON file).
{
               "reports": [
                          "agencyORI": "TX8675309",
                          "actionType": "INSERT",
                          "dataYear": 2022,
                          "publicContact": {
                                   "citizenCallsForService": {
                                             "count": 22,
                                             "valueType": "ACTUAL"
                                    },
```

```
"officerInitiated": {
                         "count": null,
                         "valueType": "NOT APPLICABLE"
               },
                "courtActivities": {
                       "count": 12,
                       "valueType": "ESTIMATED"
                }
},
{
        "agencyORI": "TX8675309",
        "actionType": "INSERT",
        "dataYear": 2023,
        "publicContact": {
                "citizenCallsForService": {
                       "count": 22,
                       "valueType": "ACTUAL"
               },
                "officerInitiated": {
                       "count": null,
                       "valueType": "NOT APPLICABLE"
               },
                "courtActivities": {
                       "count": 12,
                       "valueType": "ESTIMATED"
                }
},
{
        "agencyORI": "TX1234567",
        "actionType": "INSERT",
        "dataYear": 2023,
        "publicContact": {
                "citizenCallsForService": {
                       "count": 5,
                       "valueType": "ESTIMATED"
               },
                "officerInitiated": {
                       "count": 2,
                       "valueType": "ACTUAL"
                       },
                "courtActivities": {
```

```
"count": 12,
                              "valueType": "ACTUAL"
                       }
        }
     ]
}
```

APPENDIX B: FILE NAME AND SUBMISSION

This section sets forth the requirements for submitting public contact data to the FBI. The bulk load is used to provide reports to the system outside the National Law Enforcement Public Contact Data Collection web application interface.

4 FILE NAME AND SUBMISSION

The FBI's CJIS Enterprise File Transfer Service or the UCR Submissions Dashboard is used to provide bulk loads of LEPC Counts to the FBI. The data must be created in one of two formats and conform to the file naming convention defined below.

- JSON Flat File as defined in this document (National Law Enforcement Public Contact Data Collection Flat File Technical Specification)
- XML (eXtensible Markup Language) as defined in the National Law Enforcement Public Contact Data Collection Information Exchange Package Documentation (IEPD) Specification

The files require the following naming convention for submission to the LEPC system. The file naming convention guarantees uniqueness of the file upon submission to the FBI. The file naming convention is made up of four elements and a file name extension (either .json or .xml).

4.1 Four elements required in .json and .xml naming:

- **ORI** Agency ORI submitting the data in the nine-character FBI UCR ORI format.
- **Date** Date the file is created in Year, Month, Day format of YYYYMMDD.
- **Time** Time the file is created in 24-hour clock format for hours and minutes, HHMM.
- Unique number Unique sequence number (maximum 10 digits) to make the file name submitted for the ORI at a specific date and time unique. This is included to ensure that files are not overwritten during upload and processing.

4.2 Maximum length of the law enforcement public contact report file name:

The maximum file name is limited to 124 characters including the file extension (.json or .xml).

4.3 Valid file name extensions:

- .json used when submitting an uncompressed file in JSON format.
- .xml used when submitting an incident in XML format.
- A .json or .XML file may only contain a singular law enforcement public contact report.

File name must be constructed in the following format:

ORI456789_YYYYMMDD_HHMM_###.json ORI456789_YYYYMMDD_HHMM_###.xml

File name examples:

WV0123400_20171230_0953_0001.json WV0123400_20171230_0953_0002.json .

.

WV0123400_20171230_0953_0053.json ORI456789_20170712_0445_0001.xml ORI456789_20171001_2327_0001.xml

APPENDIX C: MANDATORIES

This section sets forth the requirements for reporting LEPC data elements to the FBI.

Data Element Requirements

Data elements designated as mandatory must have data values entered for them in data records submitted to the FBI or the reports to which they relate will be rejected as containing errors. Examples of mandatory data elements are agency ORI Number, Action Type, and Data Year. If an LEPC report submitted on the electronic submission lacks entries agency ORI Number, Action Type, or Data Year, the report will be rejected.

APPENDIX D: ACRONYMS

Acronym	Term
APB	Advisory Policy Board
CJIS	Criminal Justice Information Services Division
CLESU	Crime and Law Enforcement Statistics Unit
COLECT	Collection of Law Enforcement and Crime Tool
FBI	Federal Bureau of Investigation
IEPD	Information Exchange Package Documentation
ITMS	Information Technology Management Section
JSON	JavaScript Object Notation
LEEP	Law Enforcement Enterprise Portal
LEOKA	Law Enforcement Officers Killed and Assaulted
LEPC	Law Enforcement Public Contact
LETSU	Law Enforcement Technology Services Unit
NIBRS	National Incident-Based Reporting System
ORI	Originating Identifier
SDAU	Software Development & Architecture Unit
UCR	Uniform Crime Reporting
UoF	National Use-of-Force Data Collection
XML	Extensible Markup Language

APPENDIX E: ERROR MESSAGES

Appendix E provides predefined error codes and messages that indicate reasons for submission rejection. If the system rejects submissions for any of the reasons denoted below, the data will not be stored in the database.

Error Code	Error Message
931	THE ORI INFORMATION IS DUPLICATED IN THE REFERENCE DATA.
932	THE ORI WAS NOT FOUND IN THE REFERENCE DATA.
933	THE ORI IS COVERED BY ANOTHER AGENCY.
934	THE ORI IS MARKED AS DELETED IN THE REFERENCE DATA.
LEPC017	INVALID FORMAT FOR LEPC SUBMISSION.
LEPC012	INVALID YEAR FOR LEPC SUBMISSION.
LEPC172	DATA YEAR CANNOT PREDATE 2022
LEPC020	INVALID VALUE FOR CITIZEN CALL FOR SERVICE COUNT
LEPC030	INVALID VALUE FOR OFFICER INITIATED COUNT
LEPC040	INVALID VALUE COURT ACTIVITIES COUNT
LEPC013	CANNOT SPECIFY COUNT IF NOT APPLICABLE OR NOT AVAILABLE IS SELECTED
LEPC016	INVALID ACTION TYPE FOR LEPC REPORT
LEPC018	AGENCY MUST BE IN ACTIVE STATUS TO SUBMIT LEPC DATA

APPENDIX F: WARNING MESSAGES

Appendix F provides predefined warning codes and messages that indicate the need for data quality checks. If the system sends a warning for any of the reasons denoted below, the data will be retained in the database, but should be audited for accuracy.

Warning Code	Warning Message
LEPC220	ZERO VALUE FOR CITIZEN CALL FOR SERVICE COUNT
LEPC230	ZERO VALUE FOR OFFICER INITIATED COUNT
LEPC240	ZERO VALUE FOR COURT ACTIVITIES COUNT
LEPC221	NOT APPLICABLE REPORTED FOR CITIZEN CALL FOR SERVICE COUNT
LEPC231	NOT APPLICABLE REPORTED FOR CITIZEN CALL FOR OFFICER INITIATED COUNT